

ABSTRACT

An electrical inter-connection is provided such that a terminal pin which is positioned in a pin block extends through a plated through-hole in a circuit board substrate and is connected with the circuit board using a conductive bonding agent such as solder. The terminal pin is capable of inter-connection with conductive elements located on each major side of the circuit board and eliminates the need for an interference fit between the terminal pin and circuit board. The pin block includes a body and at least one stand-off. The stand-off maintains the body a sufficient distance from the circuit board substrate to enable a solder fillet to form between the plated through-hole and the terminal pin during re-flow processing. The electrical inter-connection further includes an eccentric aperture in the circuit board suitable for interference fit inter-connection with a protruding cylindrical feature such as on an electrical ground that has poor solderability characteristics. The preferred embodiment limits normal forces caused by temperature cycling, vibration, and other conditions to two areas of contact yet enables adequately low electrical contact resistance.